MODULAR MEASURING OR TESTING DEVICE

BACKGROUND OF THE INVENTION

INS A1

The present invention concerns a modular, portable device to measure or test components in optical or electrical networks.

INS A2

Such devices are used to test and measure the performance or function of a component in an optical or electrical network, i.e. a data network with optical or electrical data transmission. In order to ensure mobile use of this devices, they must be of a portable size, meaning that the devices must have small dimensions and low weight.

A conventional device, such as the Agilent E6000-Series from Agilent Technologies, has a base module containing base electronics with a programmed, or programmable, computer and storage medium. On the front side of the base module are controls, e.g. keys and buttons, as well as a display device in the form of an LCD display. On the back of the base module is a receptor shaft, which acts as a receptor for the function module. Such a function module contains a functional unit with measuring or testing electronics, which work together with the base electronics of the base module when the function module is attached. The function module may contain a laser, for example, which is used to generate measurement or test signals.

In order to carry out various measurement and test procedures, various function modules are provided, which are interchangeable and are each individually inserted into the receptor shaft. The various function modules may be fitted with lasers, for example,

Ins A3

~~Summary~~

The present invention concerns a modular, portable device (1) to measure or test components in optical networks. It contains a base module (2) with base electronics, which features controls and a display device on the front; at least one function module (5, 6), which is attached by means of a mechanical interface to the outside of the back (4) of the base module (2), and contains a functional unit with measurement or test electronics, which work together with the base electronics through a functional interface, wherein the function module (5, 6) is detachably joined to the base module (2) and, depending on the application, may be replaced with another function module (5, 6) with another functional unit.

(Fig. 1)